Dr. Peterson
Welcome: NASA Workshop
8 a.m. Monday, Aug. 11, 2014, Aerospace Systems Design Laboratory, Weber SST

Good morning, and welcome to this kickoff workshop for the Innovative Conceptual Engineering Design (ICED) Epic Challenge 2014. I can't think of a better place for this event than right here at Georgia Tech. Our Daniel Guggenheim School of Aerospace Engineering is one of the oldest and largest education programs of its kind in the country. As early as 1917, our Institute had been asked to instruct U.S. Army personnel in aviation matters.

In addition, Georgia Tech has a long and distinguished history with NASA, and we continue to collaborate in a number of areas with it. We are enormously proud of the role and impact that our faculty, staff, students and alumni have had on the space shuttle program, from the first launch of Challenger in 1981 that was commanded by Georgia Tech alumnus John Young, AE 1952, to the last mission of Atlantis with Dr. Sandra Magnus, MSE 1996, as one of a four-person crew.

There are 14 Georgia Tech graduates who have flown on the shuttle and a huge number of engineers and scientists who have helped to make the U.S. space program successful. Hundreds, and perhaps thousands, of Georgia Tech alumni have worked for NASA over the years as researchers, engineers and administrators, including about 150 full-time engineers and co-ops currently employed today at facilities such as the Johnson, Kennedy and Marshall Space Flight Centers. It was my privilege in 1981-82 to work as a visiting research scientist at the Johnson Space Center in Houston. Nearly one-third of the research conducted by faculty in our School of Aerospace Engineering is supported by NASA.

Just a small sampling of some of our current associations with NASA:

A device designed by engineers at the Georgia Tech Research Institute (GTRI) is part of the Hurricane Imaging Radiometer (HIRAD), an experimental airborne system developed by the Earth Science Office at the NASA Marshall Space Flight Center in Alabama.

The National Aeronautics and Space Administration (NASA) has awarded $2.4 million to the Georgia Institute of Technology to develop a new type of radar system that will be used to study the Earth's ice and snow formations from the air. The system could provide new information about the effects of global climate change.

Five Georgia Tech graduate students are part of the 2013 NASA Space Technology Research Fellows class, and we expect several will be among the 2014 class soon to be announced.

So now you are here, about to get started on a year of research that at times will be both exhilarating and humbling. To get to this point, you have been mightily challenged, and you have vigorously challenged yourselves. But I predict that in the coming year you will be challenged in ways that you haven’t been, in ways that you can hardly imagine as you start this adventure.

What a great opportunity you’re about to have, thanks to the investment that NASA is making in this program and the investments of time, energy and expertise that you will make in return. You will have access to some of the world’s best aeronautical minds from NASA, industry and academia. Through collaboration with motivated graduates and undergraduates from some of our nation’s best universities, you will tackle a problem that will stretch you and tax the limits of your understanding.

Your assignment is daunting: to engineer missions to identify, capture, and redirect an asteroid to a stable orbit around the moon so that astronauts can later visit it. The answers you come up might one day become part of the protocol for us to complete

just such a mission. We hope you have a great week here and a great year as you take on the ICED Epic Challenge 2014.